

## C L A I M S

1. Method for connecting the end (3) of a flattened tube (4) of plastic foil to the beginning (1) of a subsequent tube (2), said tubes (1, 2) being used in particular for  
5 applying sleeves onto bottles or the like, characterized by the following steps: the leading edge (5) of the beginning (1) of the flattened tube (2) is provided with an obliquely cut-away corner (7) at both longitudinal edges; the thus established two loose lips (8) are separated from each  
10 other; the end (3) of the spent tube (4) is slid between the lips (8) and fixed in relation to said lips.
2. Method according to claim 1, characterized in that the end edge (9) of the spent tube (4) is at a distance from those locations (10) of the longitudinal edges (6) of the  
15 subsequent tube (2) where the obliquely cut-away corners (7) of that tube end, thus leaving a space between the longitudinal edges (6, 11) of both flattened tubes (2, 4).
3. Method according to claim 1 or 2, characterized in that adhesive tape is used for fixing the ends (1, 3) of the  
20 tubes (2, 4).
4. Method according to claim 1 or 2, characterized in that in order to fix the ends (1, 3) of the tubes (2, 4) in relation to each other, the materials of said tubes are melted together by means of a short-time, pressurized supply  
25 of heat.
5. Device for applying the method according to one of the preceding claims, characterized by: a frame (13) in which some reels (14) of flattened tube (2) can be accommodated; means (15) for supporting the beginnings (1) of subsequent  
30 flattened tubes (2), said beginning being provided with obliquely cut-away corners (7) near its longitudinal edges (6) for forming loose lips (8); a guide (19), extending in parallel to said means (15) for supporting the beginnings (3) of the subsequent tubes (2), for supporting a transport  
35 module (20) comprising a beak (21) situated within said

tube, which is kept in place by rollers (22, 23) mounted outside of said tube, and a tube transport motor (25) drawing the tube across the beak (21); with further means being provided for bringing said transport module (20) to a location where the beginning (1) of a subsequent tube (2) is situated for bringing the end (3) of a tube (4) between the lips (8) of said subsequent tube.

6. Device according to claim 5, characterized in that means as in the shape of clamping members (18) are present for clamping the beginning (1) of a subsequent tube (2), at a distance from said lips (8), for the time during which said tube is not used.

7. Device according to claim 5 or 6, characterized in that after commencing use of a subsequent tube (2), the transport motor (25) will temporarily move it at a higher speed in order to create a buffer supply (30), which is used during connecting the end (3) of one tube (4) to the beginning (1) of a subsequent tube (2).

8. Device according to one of the claims 5 - 7, characterized in that for connecting the tubes (2, 4) to each other, the device is provided with sealing beams (29), which are carried by the transport module (20) and are situated above and below said tube (2, 4) and can be brought together and be heated for melting the abutting parts of the tubes together where a part of the beak (21) is situated.

9. Device according to one of the claims 5 - 8, characterized in that the device is provided with a belt (15) being supported by the frame (13), for supporting the lips (8) of a subsequent tube (2).

10. Device according to claim 9, characterized in that the transport module (20) is provided with belt guides (27) being connected to the belt (15) led across some rollers (16) and being located at both sides of the beak (21) and extending up to near its side edges.

11. Device according to one of the claims 5 - 10, characterized in that when a printed foil is used, the transport module (20) is provided with a detecting photo cell (31) which, on detection of a certain point of the print, will  
5 stop the tube transport motor (25), a cutting knife (32) being present for cutting the tube (4) in a certain position.

12. Device according to claim 11, characterized in that a cutting knife (32) is present at each clamping member (18)  
10 for clamping the beginning (1) of a subsequent tube (2) and that operation of the clamping member (18) and the cutting knife (32) takes place by means of a pressurized medium cylinder being located on the transport module (20).

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